Leading Plays and Methods of Carrying Them Out.

SCIENCE THE GROUNDWORK.

Well-Known Manœuvres Described for the Novice's Benefit.

Field-Deland's Original Flying Wedge,

the big college football games and wave parti-san flags, do so merely because of a deep love for one or the other university and not so much for the sake of studying the fine points of the not understood by a majority of the general public, so that it is no wonder that one hears spectators asking all sorts of questions while two big elevens are struggling mightly for supremary. Partisans who do not appreciate fine points, but who go wild with joy over vie tory and plunge into the depths of despair over defeat, are always anxious to know how the

have been eyewitnesses.
"I saw the game," said a college man after one of the important battles, "but how was it that Princeton made the last play? How did the Tigers get the ball over the goal line?"

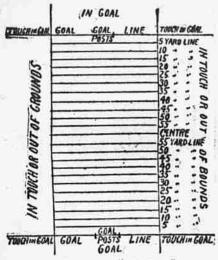
Why, they just lined up and when the tower ing pile of men was disintegrated they found Kelly of Princeton over the line with the ball,

question except one fellow who said he bewho said after some hesitation:

I think it was a revolving wedge, or a turtle-

exact play and its formation could not be exdon, nobody knew more than the fact that Kelly has been "pushed over the line."

It will be surprising to these who do not know a great deal about football that every play mad by a first-class eleven has a distinct name. The tators who see piles of men heaped up over



THE FOOTBALL "GRIDIRON."

to earth in a tangle of arms and legs are impressed with the idea that there is no science in dents of the game, men who have played it and who watch the movements of its players as if on a chess board, appreciate the scientific plays and can pick out flaws and faults that are not It is probable that a few followers of football

do not know the essential duties of the players who make up a team. It is also a fact that many persons do not know that whenever a sinomes involved, although perhaps several of the players do not seem to be mixed up. Running with the ball successfully necessitates more genuine science and skill than the average person has any idea of. "Interference" covers a point in football that means almost the entire success of a team. In the old days before interference was known, football was a game of individuals. That is why it was a sport in which team play did not cut much of a figure and science was not the chief factor. But with the progress made in coaching, football soon developed into a contest of not only strength, courage, nerve, and skill, but also of

The "rush line" is really the most important part of a football eleven. It is, so to speak, the skirmish line as well as the chief fortification against the assaults of the enemy. It is made up of seven men, three on each side of the "contre rush," the player who handles the ball before it is put in play. On the centre's immediate right and left are the "guards," next to whom are the "tackles," with the "ends" on the two extremes. These seven men are carefully trained and are coached in various departments of play which are almost numberless. The duties of the "centre rush" are important

of play which are almost numberless.

The duties of the "centre rach" are important factors in successful team play. He not only puts the ball in play by snapping it back to the gearter back, but he is called upon to stand incessant attacks directly aimed at his position. He must be big, strong, and, if possible, fast on his feet. After snapping the ball in play, it is his duty either to plunge forward into the opposing centre rush or lift him to one side, whichever way his own team is carrying the ball. In dealing with the opposing centre rush me may dispose of him in two ways: Either by failing on him if he is down low, or by lifting bilm up if he is reaching over him. In defensive play the centre must not stand still and block his opponent, but must endeavor to throw the opposing snap-heak to one side and break shrough the field and taking a chance at an opponent with the ball. It is also his duty to break through the line in an endeavor to block punts. The best way for a centre to do this to give his opponent's arm a sudden jerk to one side and silp through the opening on the chier side it possible. But such a move cannot be made without the assistance of one of the guards.

The puards must be more active than the centre. Among the most important duties expected of them are blocking or guarding against the sitacks of opponents on the centre, providing interference for the man on their add who carries the ball, taking the oval themselves now and then, blocking punts, tacking apponents after breaking through the ine, and making holes in the opposing ine, through the line, and making holes in the opposing ine, through the line, and making holes in the opposing ine, through the line, and making holes in the opposing ine, through the line, and making holes in the opposing ine, through the line, and making holes in the opposing ine, through the line, and making holes in the opposing ine, through the line, and making holes in the opposing ine, through which they can drag or pund none of their own to an advantage.

slowness are fatal in many ways. In breaking up mass plays, the guards have particularly hard work. They must so attack formations of this kind that the man with the ball can be sclosed before he reaches the line. The tackles hold positions which are of vital

themselves and the ends. It is necessary for them to cover an immense amount of territory to run occasionally with the ball and to hustle down the field on punts. In a word, they must be all that the name implies. They must tackle and throw every opponent with the ball and

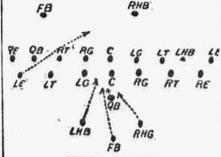
The end rushers are to be depended upon to tackle men who try to secure an open field and make long runs. They are practically alone, as they play well out from the rest of the linemen. In breaking up interference and downing the man with the ball, they meet their hardest task. The ends are frequently used in at-tack, and are usually the first men down the field on kicks by their own side. So much for the duties of the rush line.

There are four backs, the quarter, two halves and a full. The quarter back takes the ball from behind the centre rush and passes it to whatever player has been selected to take it for a'run. He must be cool-headed, fast in his movements and quick to take advantage o openings made in the line. He should be a sure tackler and not afraid of getting in front of mass plays. The other backs are the men who do the bulk of the rushing. They are sup around the ends, behind interference or through other, and all should be able to punt the ball Good judgment in advancing with the ball be hind members of their own team who pave the way is the chief point which makes their work

AN ORDINARY "LINE-UP." One of the plays more frequently used in advancing the ball in "running around the ends." This method of attack requires speed on the part of the man who carries the ball and vigorous aggressiveness by certain members of his own side. If it is decided to send a right half back around the opponents left end, what are the methods! When the teams line up, the players must be spread out in this way, the lower side in the diagram supposed to have the ball:

interfering, while the right guard hustles along behind the right half back in order to keep him from being tackled behind. The opponents, as soon as they catch on to the drift of the play, make a concerted movement toward their left, in order to break up the interference and down the man with the ball. The full back and right half back remain well down the fleid to defeud the goal in case the opponents get that far. In making this play in the opposite direction the same methods of attack prevail.

"Bucking the centre" has become a popular expression in football talk, but it does not mean that the centre rush of the opposing side is the player who alone receives the attack. The play is made in several ways, one of which comes under the technical head of "half back through opponents" right guard and centre. It is essentially a mass or push play and involves plenty of quickness and muscle. In the majority of cases, the backs on the eleven which has the ball stand compactly and close behind the quarter back, the left half behind the opening between his own left guard and tackle and the right half behind his own right guard and tackle. The full back is in the middle directly behind the quarter back and the rest of the men hold their regular places, the ends being about two yards outside of the tackles. The opponents usually send all but two men into the line in order to both employ defensive tactics and to break through if possible and stop the play. Before the ball is snapped the teams are lined up something like this:



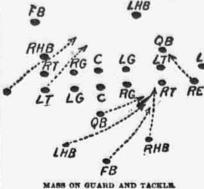
BUCKING THE CENTRE.

have been beaten off. So whenever it happens that in "bucking the centre." the men who carry the ball in the rushes are unsuccessful to an be ascribed to the atreagth, artitity and skill of the opponents who prevent the making of heles and can stop the so-called wedge before any ground has been made.

The full back and right half back can be sent with the ball into the same place with almost the same kind of play, or any of the backs can be jammed into a hole made between the opposing centre and the left guard on the same principles. But, in any event, the brunt of the attack goes upon the guards and centre, which is practically what is known as "bucking the centre." importance in defensive work especially. They are expected to stop not only plunges into the

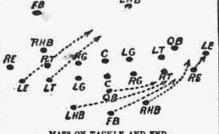
practically what is known as "bucking the centre."

Tackle plays are growing in popular favor nowadays for the reason that they afford more chances for open work and long runs than line bucking near the centre. When the attacking team concludes to send the man with the ball through an opposing tackle, there are just two ways of doing it. One is to force an opening between the tackle and guard and the other is to got between the tackle and end, in each case making the bulk of the rush on the tackle. If, for instance, the captain of the team which has the ball concludes to drive his right half back between the opponents' left tackle and guard, he forms his backs practically the same way as for a plunge through the centre. When the play is under way it looks like the appended:

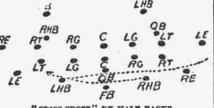


The ball is put in play as usual and the right guard and right tackie promptly try to make a hole between the opposing left guard and left tackie. The opposing quarter back who is backing up his tackie is generally shut off by the right end, who quickly breaks through the line. As the right half back comes ahead at full speed he takes the ball from the quarter back at close quarters and dives between the guard and tackie. The quarter back and the other two backs, or possibly their left guard follow him with a sort of flying mass formation and he is literally crushed into the opening. The left end and left tackle also break through and hurry across the field back of the opponent's left wing in order to act as interferers. The play with any one of the backs carrying the ball can be made in the same way or it can be reversed and directed to the opponents' right tackle and guard.

When the ball is to be carried between the opponents' left tackle and end, it is necessary to select the fastest sprinter of the backs as more ground must be covered before the line is reached. The captain of the attacking side forms his men as in the preceding play, and the onslaught is often made in this manner:

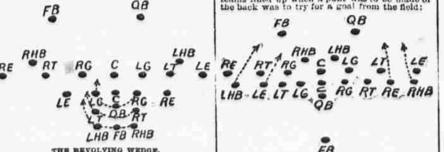


When the ball is in play it is the immediate duty of the right end to dash at the opposing left end with the idea of driving him as far away from the line-up as possible. The right tackle makes an attempt to push the opposing left tackle backward and at the same time crowding him in toward the middle of the line. If successful in these parts of the play there will be an example of the line where we have the play there will be an example.



"CRISS-CROSS" BY HALF BACKS.

It will be noticed that the ends of the team having the ball are drawn back a trifle from their usual places. The plan is to get the left half back around the opponents left end on a "criss-cross." The ball is put in play and the right half back taking it on a quick pass makes tracks for the left end of his line. His left half back, who has moved back unnoticed, stands perfectly still until the right half comes past. Then the left half seizes the ball on a rapid pass and makes a dash for the right end of his line. The first movement to the left by the right half back anturally compels the opponents to bustle over that way in order to stop the advance, so that the left half tack's rush in the opposite direction is entirely unexpected. The full back, as soon as the left half gets the ball, makes a rush for the opposing left end and puts him in a box. The right end breaks through, meanwhile, and blocks off the opposing quarter back. The right tackle and right guard block the opposing left tackle and guard respectively, so that they cannot break loose. The left end and left guard leave their places and rush along with the man who is rapidiv carrying the ball toward the unprotected left end of the opponents. The right half back, after giving the ball to the left half, continues on his way around the opponent's right end and tries to circle around to the assistance of the man with the ball. The quarter back, after passing the ball, does not move until the left half has finally received the ball for the final run. Then he dashes toward his right and prevents any opponent from getting in a tackle. One of the dankers of the play is in starting the halves too near the rush line, so that the man with the ball. The quarter back, after produces a long run around the end, and on several occasions in the play the instanting the halves too near the rush line, so that the num with the ball might be interfered with by one of the field. The "criss-cross" can be worked in various other ways, the ball "CRISS-CROSS" BY HALF BACKS.



THE REVOLVING WEDGE. Compactness is the principal factor in making this play successfully. The guards move as close to the centre rush as possible, the tackles take up positions close behind the guards, the half backs are immediately behind the tackles, and the full back is the keystone, so to speak, with the quarter back is the middle. The ball is put in play, and for a moment the wedge forces its way straight forward, the ball being given to anybody that the quarter back



QUARTER BACK'S LONG PASS.

QUARTER BACK'S LONG PASS.

The teams line up quickly, and as they do so the right half back runs far out to a position near the side line. It is necessary for him to be quick about it, as discovery by the opponents is always fatat. The formation behind the quarter back is not compact as a rule in order to create the impression that the ball may be kicked. As soon as the oval is anapped back by the centre, the right half, there has must get under way. The quarter back with all his strength hurls the ball at right angles directly to the right half. The pass must not be forward and the half back must be behind the ball when it is put in play, otherwise a foul will be declared and the ball will be lost. The left half back and full back, toxether with the quarter back, as soon as the latter has passed the ball, must make an attempt to set around their opponents' left end so as to provide interference. The right end, if successful in shutting off the opposing left end, can then pay attention to the backs who are generally the only players between the right half back and the goal line. In 1893 Morae of Princeton got such a good start that he ran more than half the length of the field before he was downed. He was not discovered until the ball had been passed half way across the field to him, and when he caught it he was under rull headway. The long pass can be made to any of the backs, or to an end rush if necessary. It is generally conceded to be one of the most spectacular maneuvres in the game.

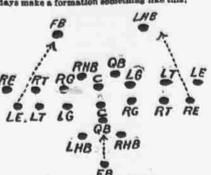
"Interference" is semething that has cropped up in more recent years. It is called by that name rightly, for it consists in a player's efforts to interfere with an opponent's attempt to tackle the man with the ball. Although it is unlawful to lay hands upon an opponent's attempt to tackle the man with the ball. Although it is unlawful to lay hands upon an opponent's attempt to tackle the man with the ball. Although it is unlawful to lay hands upon an opponent unless he has the ball, it is legal to yet deliberately in his way

by attempting to block off the opposing left tackie and end or any players who may have placed themselves near that end. The cuarter back, right balf, and full buck follow with rapidity and commactness, thereby affording a sort of shield behind which the man with the ball can run. The latter receives assistance generally from his left guard, who jumps back from his place in the line and pushes his courads along, at the same time acting as a sort of rear guard. In order to gain any ground, however, the man with the ball must keep his head and watch out the openings through which he may advant hour. If he strikes a clear field and has time to wait for one of his interferers to reach him it is helted by the every really full back and his assistant, who are playing well back cand his assistant, who are playing well back count to be tackled to pass the ball to one of his own side, if the latter is near enough, and then turn himself into an interferer like the others. This latter play is a good one, and has proved effective in many instances, but it is not used much for some unknown reason. It is more conducive to open play and makes the game for more exciting. It is simple and pretty to watch, if well made.

Interference, while used a great deal in centre and end plays, is most effective in the open field, especially after a punt has been caught and a long run up the field is contemplated. It has also proved benedical from a detensive point by providing some sort of deployed protection for a back who is cadeavoring to catch a kicked ball. The Princeton players this year are working a sort of interference for their back, who is to catch the ball, and it is thought that it will be generally adopted when it has been more thoroughly tested. The figers, also, are the inventors of a formation of backs and tackles to prevent their punter from being blocked by opponents. That is "interference" in a way, but not offensive, which is the stributed when it has country, not excepting the veterans Morfat of Princeton and Buil of

QB

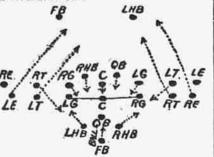
OLD FORMATION FOR PUNTING. As will be seen in the cut, the full back is left unprotected behind the quarter back from whom he is to receive the ball for a kick. Every other man on the team takes a place in the rush line and blocks hard. The men on both ends of the line, especially the ends, try to break through and run down the field so as to tackle the opposing backs if the latter try to



By this means the backs can gather compactly about the quarter, and when the signal is given for a kick, the full back can draw away quickly enough to get the ball at the proper distance from the line. The rush line blocks the centre hard, and the two half backs are in a position to block off the ends or tackles if the latter break through the line. As in the previous diagram, it will be noticed that the ends never fall to break through and rush down the field upon the opposing backs.

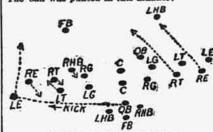
There is much science in punting successfully, more than a novice has any idea of. A good full back, besides keeping his nerve while punting the ball out of a "bunch." also takes in the situation back of his opponents line. If he notices that one of the backs is playing too far in or over to one side, be will direct his punt accordingly and trust to his ends to get down the field in time to nail the opponents when they pick up the ball. In a word, an expert back tries to punt the ball in such a manner that the opponents cannot catch it. Brooke of Pennsylvania was one of the few punters who could put a revolving motion into the ball so that it often twisted itself out of an opponent's arms.

While a full back is trying to punt, the op-



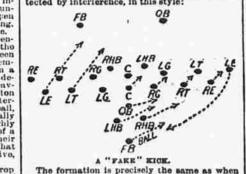
BLOCKING A RICE.

By this cut it will be seen that the centre of the team having the ball must put up a remarkable resistance, as five opponents are pressing toward the middle. The half backs look out for the opposing tackles or the opposing centre men, if they succeed in getting through, while the tackles and onds go down the field, following the ball. The ends of the opposite side are generally too far away to do much damage, although ends have been known to block kicks. Rogers, end rush of the Carlisle Indians, ran around Yale's left end so quickly in the recent game that he not only blocked Full Back McBride's kick, but also fell on the ball.



snap back. The left tackle breaks through, and so do the right tackle and end, in order to provide interference. The oupenents have, for the most part, dashed forward to stop a run by one of the backs, so that in order to ston the left end, who has the ball by this time, hey must either retrace their steps or rely on the backs to bring him down. The only risk r. in making the play is in having the punt blocked. Williams was protected by a phonomenally strong rush line and was also an expert kicker. Wyckoff was nearly as good, but the weakness of his line was responsible for many misses. Baird, Princeton's quarter back, should accomplish this play with such a great end rush as Cochran to depend upon.

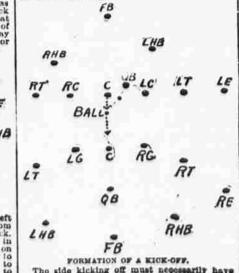
Advancing the ball on what is known as a "lake kick" is tried nearly every day and with considerable success. The idea is to make the opponents believe that the ball is to be kicked and then rush it shead by the backs, protected by interference, in this style:



A "FARE" RICE.

The formation is precisely the same as when a punt is to be made. The full back drops back and receives the ball from the quarter back. Without moving from his tracks, he makes a motion to kick the ball, which generally stops the onward rush of the opponents. Then, dodging the opposing left end, if he is going that way, the full back makes a dash around his own right end, following in the wake of strong interference provided by the other backs and the right end, hard blocking by his right guard and tackle being necessary. His left end and tackle go through the line just the same as if the ball was really kicked. The play can be made, too, by the full back, after getting under way, passing the ball to one of the other backs.

There was a time not long ago when the time-honored kick-off seemed booked for oblivion. That was when the flying wedges were in vogue, and the teams formed themselves into human battering rams. But the brutality of the momentum plays became so great that they were cither abolished or greatly modified, and the rule was made that a game must be started by kicking the ball off from the middle of the field. There are different ways of arranging the teams at kick-off, but among the most popular is the following:



Struggli ng Hard

—these other stores—to get But how can they? Even if they buy from the manufacturer, his profit must be added to theirs; if from the jobber, then a third profit goes on. As we weave the carpets we retail, we are satisfied with a small per centage above cost of produc-

> To accommodate our customers we carry other makes; Savonneries at \$1.10; Moquettes at 773c.; Axminsters at 85c.; best all-wool ingrain at 1.05 .85

Carpet Rugs cost very little in this store-8.3x12 at \$15 up; 6x9 at

.75

(Philadelphia, 809- 811 Chestnut St.)

PATTERNS

SELECT

FROM.

Royal Wilton . .

Body Brussels . .

Body Brussels . .

Worsted Velvets .

Worsted Velvets .

Tapestry Brussels

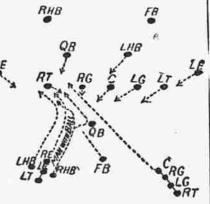
Tapestry Brussels

plenty of men on a line with the ball, some to follow it to the extent of its flight, others to tackle one of the opponents if he attempts to run back with it. The backs must also be in their regular places so that they may handle the ball if it is punted back, as is most likely to be the case. The opposite team is deployed in such a manner as to completely cover all parts of its territory. If the kiek-off is a short one to either side, therefore, the tackles and enda can get it and make a run. If it is driven hard down toward the goal line, no matter in what direction, the backs are on hand to receive it. If they decide to run with the ball instead of kicking it back, they will find their fellow players, if they are well trained, in positions ready to afford in efference. In the old drys it used to be considered a gain to kick off, but modern experts believe it is to a team's disadvantage to kick off, for the opponents get the ball and hold it until they either kick back or loss it after trying to gain the necessary amount of ground.

The flying wedge, which came so near taking

lose it after trying to gain the necessary amount of ground.

The flying wedge, which came so near taking the place of the kickloff, while not permitted now under the new rules, was probably the most interesting though complicated play ever tried on a football field. It was invented by Lorin F. Deland, who is one of Harsard's football advisers, and was first tried at Springfield against Yale. The play was eatirely unexpected and was not tried until the beginning of the second half. Then it was that Harvard's players forsook the usual alignment for this one:



The formation, before it was put in motion, was so bewildering that the Yale team was completely puzzled, although the order went along the Blue line:

"Watch for the man with the ball!"
There were two compact groups of Harvard players, as will be seen in the above cut; the one on the right was made up of the centre, two guards and one of the tackles; the other to the left contained both end rushers, both half backs and the left tackle. Midway between these groups stood the full back and on the centre line the quarter back stood with the ball. At a signal from the captain the group of men to the right—and they were the heaviest on the team—dashed forward at top speed, close behind one another, and passed in front of the quarter back, thereby shutting off for a moment the disposition of the ball. Simultaneously the group to the left got under way and as they came together on a line with the quarter back the latter quickly passed the ball to one of the half backs.

The wedge, which was now almost compact and under a full head of steam, dashed on the apex pointing in the direction of Yale's right tackle, who was quickly engulfed. The man with the ball was clevely concealed until Yale's left end had been cut down, when he was shed out of the half particular.



make either of the above moves, or with the full back as his principal guide he can run around the opponents' left end, his own right end clearing the way for him. If the full back receives the bail, he is at liberty to make any of the pilsy to be made by the two half backs already described, or he can make a dash into

J. & J. Dobson, 2 East 14th St.

an jopening made by his right tackle between the opposing centre and left guard.

It is also possible for one of the backs to punt the ball for either end rush, while the "tandem" and the other men are making a build dash into the line.

At the command "Guards right!" the play is reversed, the tandem formation being directed to and the opponents left guard and tackle.

The rapialty with which the Pennsylvania eleven makes these plays is the secret of their success. There is seldom a hitch in the signals, and the men have been so thoroughly drilled as to their respective duties that they go through the judy like elockwork. The Quakers worked he "guards back interference" almost incessantly in the recent game with Brown University. Whenever Capt, Minds or the quarter back crief out "Guards left!" the big guards, McCracken and Hare, leaped back and lined up behind Goodman, their left tackle, who had moved up next to Centre Overfield. Jackson and Morice, the half backs, were close behind the guards, while Minds, the full back, was at the right of Morice. When the attack was begun in nearly every instance the Brown men had difficulty in finding the ball. On one occasion while Goodman, McCracken, Hare and Weeks, the quarter back, were tearing up the opposing left guard and tackle, Minds, behind interference, hustled around the left end of Brown's line for forty yards. The next play or the same formation resulted in a 15-yard gain through the centre of Brown's line. The force which is necessary to make the play successful is a bit dangerous, for if used by a heavy team egainst light opponents severe injuries may follow. Nearly every team in the country has experimented with the "guards back" interference, and it has, in every case, been pronounced one of the most effective methods of attack must be collected and careful, especially if the code is in any way complicated. In the big cames played here in the past spectators back heard the quarter backs yell something like this:

"Nine! Fifty-two! Twenty-seven! Five! Thir

ter back the latter quickly passed the ball to one of the half backs.

The wedge, which was now almost compact and under a full head of steam, dashed on the aper pointing in the direction of Yale's right tackle, who was quickly engulfed. The man with the ball was cleverly concealed until Yale's left end had been cut down, when he was shot out of the bunch and had practically a clear field with plenty of interferers at land.

Whether he could have made a touchdown or nobody will ever know, for just as he was getting into a good stride he stumbled and fell, whereupon it was a comparatively easy natter for the Yale men to tackle him.

Flying wedges of all sorts, shapes, and sizes immediately became popular, but the big elevens believed in more compactness, and soon the wedges were formed in the shape of the letter "V." with every man on the team having a place before the ball was put in play and the men took on momentum. As a result the long list of accidents made the game the subject for much adverse comment, until the Hules Committee abolished all such plays. A year ago, however, Coach Woodruff of Pennsylvania invented another play, which is growing in popular favor and which may call for roome new legislation in the future, as it is without doubt the roughest mass play now in existence. The formation is known as the "guards back interference" and is the principal method of attack employed by the Quakers. The men line up in this manner, when they hear the comman:

FB LHB

LHB

"Sinith or Jones, you are too slow in that case "Smith," or whate fight through. It all case "Smith," or whate fight tackle, where the plane is "smith," or whate farget take dege, "while "Jones" or any name may regard take the "guards back interfere to the squards back interference. Some quarter backs give signs with their hands, such as publing up the troosers, or placing the fingers hand is guards back interfere to the squards back interference. Some due to the man and way the hear hand, with the runder, which is public the following dev

elevens believed in more compactness, and sizes the wedges were formed in the shape of the shape

Name Pro and From Harper's Bazar. "How do you come to be celebrating your golden wedding. Binks? You've been married only three years."
"I know," and links, "but by wife and I thought